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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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NIXON PEABODY LLP 161 N. CLARK STREET 48TH FLOOR CHICAGO, IL 60601-3213			EXAMINER MEDE, ESTEVE	
			ART UNIT 2137	PAPER NUMBER
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

Application No.

10/748,489

Applicant(s)

LOOSE, TIMOTHY C.

Examiner

Esteve Mede

Art Unit

2137

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 30 December 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-23 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_.

***Claim Objections***

1. Claim 21 objected to because of the following informalities: in claim 5, line 2 the term "from an number" should be --from a number--. Appropriate correction is required.

***Specification***

2. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: in claims 19-20 the phrase "plurality of memory locations are equally spaced from each other" cannot be ascertained as the applicant failed to disclose in the specification the subject matter of which the applicant is claiming.

In claim 13, line 8 the phrase "a second memory coupled to said processor" cannot be ascertained as the applicant failed to disclose in the specification the subject matter of which the applicant is claiming as his invention.

In claim 17, line 4 the phrase "plurality of memory locations are spaced from each other" is unclear as the applicant failed to disclose in the specification the subject matter of which the applicant is claiming as his invention.

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claims 19-20 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to

one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. In claims 19-20, lines 1-2 the phrase "plurality of memory locations are equally spaced from each other" unclear and cannot be ascertained as the applicant failed to disclose the subject matter of which the applicant is claiming as his invention in the description of the claimed invention. Therefore no consideration is giving to claims 1- and 20.

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims **1-16** are rejected under 35 U.S.C. 103(a) as being unpatentable over Jackson et al. (2002/0049909A1) in view of Brunner et al. (US Patent 4,727,544) and further in view of Sibley (US 4,751,636).

**Regarding claims 1 and 12**, Jackson discloses a gaming machine, a method of applying a hashing algorithm to the contents of said next memory location and updating a key-value (para. 0088, lines 9-10); authenticating the next memory location in the media device to be authenticated (see Figure 12 of the drawings; 0089, line 12); repeating the determining, applying adding and setting steps until the next address is equal to said last memory (para. 0089, lines 1-4); determining whether said key-value is equal to a predetermined key (para. 0089, lines 7-9); passing authentication if said key-

value is equal to said predetermined key (para. 89, lines 12-13); failing authentication if said key-value not equal said predetermined key-value (para. 0089, lines 9-11).

However Jackson does not disclose that adding a predetermined number N to said ADDR such that the next ADDR = ADDR + N. Brunner discloses adding a predetermined number N to said ADDR such that the next ADDR = ADDR + N (col. 4, lines 35-36). Therefore it would have being obvious to one of ordinary skill in the art at the time of the invention to modify Jackson to include the use of adding a predetermined number in order to process the next address in memory.

However Jackson and Brunner does not disclose setting an address pointer to a first memory location in said media device and determining whether said next memory location is a last memory location to be authenticated in said media device

Sibley discloses a pointer to point to a memory start address indicating the beginning of the memory to be read (col.3, lines 66-68) as well as the last memory address (col. 4, line 1; 15-16). Therefore it would have been obvious for one of ordinary skill in the art at the time of the invention to modify Jackson to include the use of setting a pointer to point at a beginning and an ending address in order to read files that need to be authenticated in particular location in a memory device.

**Regarding claim 2**, Brunner discloses the first next memory location of is that of a media device (col. 4, lines 10-12). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Jackson to include of the use of the first memory location being that of a media device in order to read to point to and read the first memory location of the media device.

**Regarding claim 3**, Brunner discloses a method of finding out if last location is the last memory location in the media device (col.4, lines 28-38). Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Jackson to include the use of checking the last memory location is that of the last memory location of the media device in order to continue reading data of the media device until the last memory location of the device has been reached.

**Regarding claims 4 and 8** Jackson discloses an authentication process, which start by a random generation of an initial seed value random number generator that generates random seep (para. 0080, lines 16-19; para. 0023, lines 1-6; 0024, para. 0024 lines 14-18), additionally, it is well known with the art that random number generators, generates number from 0 to N (see para. 0083). However, Jackson does not disclose that wherein P is less than a number of memory locations in said media device to be authenticated. The general concept of having P is less than a number of memory locations is said media device to be authenticated and having the setting of the address pointer to a first memory location in the media device comprises ADDR to N is well known in the art as illustrated by Sibley, which discloses a address pointer pointing to a first memory location (col. 3, lines 66-68); and a data word (P) is less than a number of memory location (col. 6, lines 14-15). Therefore it would have been obvious for one of ordinary skill in the art at the time of the invention to modify Jackson to include the use of a memory location that is less than a memory location in a device and pointer to point to a first address in memory location in order to process data that need to be authenticated.

**Regarding claims 5 and 9**, Jackson discloses the method wherein said predetermined key is equal to  $Z(s)$  is equal to one  $S$  predetermined keys (para. 0041; para. 0057; 0087).

**Regarding claims 6-7 and 10**, Jackson discloses the method wherein the predetermined key is calculated and stores prior to a first time the gaming machine is authenticated (para. 0087, lines 1-11; para. 0067, lines 6-8).

**Regarding claim 11**, Jackson discloses wherein the hashing algorithm is SHA-1 algorithm (para. 0038, lines 12).

**Regarding claim 13**, Jackson discloses a user interface (para. 0048, lines 4); a CPU coupled to said user interface, said CPU comprising: a processor (the prior art discloses a IBM compatible computer which consist of processor (para. 0050, lines 2-6); a first media device coupled to said processor, said first media device adaptable to store data in a plurality of memory locations (para. 0053, lines 4-11; the limitation of the media device stores data in plurality of memory location is implicitly stated by the prior art, as the flash memory is a mass storage device); a computerized game controller which executes program code (the limitation of executable program code further comprises a plurality of instructions configured to cause said processor to determine the authenticity of said data in said plurality of memory locations is implicitly stated by the prior art (para. 0054)); performing a hash calculation (para. 0056, lines 1-2); comparing said key-value to a predetermined key (para. 0057, lines 1-9); authenticating the stored data in memory and not authenticating if hash key doesn't match (para. 0089, lines 7-13). However Jackson does not disclose that said sample memory locations being a

number of memory locations that is less than said plurality of memory locations. The general concept of having a memory location being a number of memory locations that is less than said memory locations is well known in the art as illustrated by Sibley, which discloses a data word is one less than the addressed memory locations (col. 6, lines 14-18). Therefore it would have been obvious for one of ordinary skill in the art at the time of the invention to modify Jackson to include the use of a memory location less than a plurality of memory locations in order to process data from the media device.

**Regarding claim 14**, the limitation of each of the memory locations in said sample of memory locations are separated by N memory location is an intrinsic property of the claimed invention as memory locations are always separated by a number of memory locations, therefore no further explanation will be giving.

**Regarding claim 15**, Jackson discloses a random number generator, which meets the limitations of claim 15 (para. 0024, lines 14-18).

**Regarding claim 16**, Jackson discloses all the limitation of claim 16, except for wherein the number of memory locations in said plurality of memory locations is equal to the total number of memory locations in said first media device. The general concept of the number of memory locations equal to the total number of memory locations in said first media device is well known in the art as illustrated by Sibley, which discloses comparing an address of each location being processed with a reference equal to the address of a memory location reached (col. 5, lines 21-25; col. 9, lines 15-16, col. 10, lines 1-9). Therefore it would have been obvious for one of ordinary skill in the art at the time of the invention to modify Jackson, to include the use of number of memory



locations equal to the total of memory locations in the media device in order for accurate processing of program files in the media device.

**Regarding claim 17**, Jackson discloses a method of repeatedly authentication a portion of a media device comprising; reading a plurality of memory location in said media device wherein said plurality of memory locations are spaced from each other (the game data set, consist of many different files, of which would make the memory locations to spaced from each other (para. 0024, lines 14-18); after reading each memory location, calculating a hash and a final key is determined; comparing said final key to a predetermined key (para. 0057, lines 1-5); passing said portion of said media device as authentic is said final key-value is equal to the predetermined key and repeating said reading, calculating and comparing steps (para. 0057, lines 9-15; para. 0087, lines 1-4, 11-15); failing authentication if said key value does not match predetermined key and halting operation (para. 0087, lines 15-19);

However Jackson does not disclose that the memory locations are being less than a total number of memory locations in the media device. Sibley discloses a data word in memory is less than the addressed memory location (col. 6, lines 14-15). Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Jackson to include the use of a memory location that is less than a total number of memory locations in said media service such that proper processing of program files in the media device could take place.

**Regarding claim 18**, Jackson discloses that the entire data set, or portion of the data set may be use for authentication (para. 0085, lines 20-23).

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**Regarding claim 21**, Jackson disclose a random number generator which generates numbers therefore, the limitation of N is randomly selected from a number that is less than 20 is met, as a random number generators are able to produce large number outputs as well as low number outputs (para. 0024, line 18).

**Regarding claim 23**, Jackson discloses a continuous authentication of data (para. 0057, lines 12-15).

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Esteve Mede whose telephone number is 571-270-1594. The examiner can normally be reached on Monday thru Friday, 8:30-5:00 PM, EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Emmanuel Moise can be reached on 571-272-3865. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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05/31/2007

  
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